



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/224,340 12/31/98 DIMARCO

M A62-17022-US

MMC2/1003

JOHN G SHUDY JR
HONEYWELL INC
HONEYWELL PLAZA P O BOX 524
MN12 8251
MINNEAPOLIS MN 55440-0524

EXAMINER

DINH, T

ART UNIT

PAPER NUMBER

2841

DATE MAILED:

10/03/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/224,340

Applicant(s)

DIMARCO, MARIO

Examiner

Tuan T Dinh

Art Unit

2841

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133)
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 9-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 9-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. 6) ☐ Other: _____

DETAILED ACTION

Continued Prosecution Application

The request filed on August 15, 2001 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 14 is acceptable and a CPA has been established. An action on the CPA follows.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 13, 16-17, 19-20, and 23-34 are rejected under 35 U.S.C. 102(b) as being anticipated by McCarthy et al (U.S. Patent 4,736,274).

As to claims 1, 13, 23, 24, McCarthy discloses an enclosure (10-figure 1, column 5, line 14) consider as an integrated modular cabinet as shown in figures 1-11 comprising:

a plurality of printed circuit board (PCB) modules (18-figure 1, column 5, line 22), and a chassis (¹⁴~~R~~, figure 1A), wherein each PCB module (18) include a faceplate (figures 7-11, column 9, line 11), and a connector assembly (38, column 5, line 55) disposed opposite said faceplate such that PCB module is enclosure; and

a chassis (14-figures 1-2, column 5, line 19 comprising top, bottom, and side walls, wherein said front (see figures 2-6) of said chassis (14) is configured with slots (50, column 6, lines 4-5) for receiving said plurality of PCB modules (18), wherein said

PCB modules (18) creates a seal with said chassis (see figures 4-6), and wherein said seal is resistant to EMI (column 4, lines 44-62, column 6, lines 36-48, and column 8, lines 14-37, 54-57, 62-66).

As to claim 2, McCarthy discloses the cabinet as shown in figure 7, wherein each of said plurality of PCB module (18) further comprising:

said faceplate having first and second ends; and

first and second screws (118, column 9, line 7) attached to the first and second ends.

As to claims 16-17, McCarthy discloses the cabinet as shown in figures 2-6 wherein said top and bottom panels are configured with a plurality of ventilation holes (55-figure 3) for cooling said PCB modules (81), and wherein said ventilation holes are sized to be resistant to EMI and RFI..

As to claims 19-20, McCarthy discloses the cabinet as shown in figures 2-3 wherein said top and bottom panel are configured with a plurality of guide rails (76, column 7, line 9) and each of one guide rail mounted on the top and bottom panels..

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 14-15, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCarthy.

As to claims 14-15, McCarthy discloses and satisfies all of the limitation of the claimed invention, except for showing the interchangeable of the top and bottom panels and two side of the panels, where a part of the cabinet may be relocated without modification to the operation of the cabinet, such a relocation is considered to have been within the skill of art. *In re Japikse*, 86 USPQ 70 (1950).

As to claim 18, McCarthy discloses the cabinet including the hole and satisfies all of the limitation of the claimed invention, except for the size of the hole. It would have been obvious matter of design choice to make as small (diameter) as possible to reduce the amount of space, since such a modification would have involved a mere change in this size of the hole. The change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955).

Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCarthy in view of Craker (U. S. Patent 4,716,497).

As to claims 3-4, McCarthy discloses all of the limitations of the claimed invention, except for the first and second screws is jackscrews and configured to clutch. Craker teaches the module having a faceplate (22) including the screw (60) configured as jackscrew and clutch for fastening the printed circuit board module to the cabinet.

It would have been obvious to one ordinary skill in the art at the time the invention was made to utilize the screws of McCarthy and provide the jack-screw and clutch as taught by Craker in order to fasten the module slide into the enclosure.

As to claim 5, McCarthy and Craker disclose and satisfy the claimed invention except for the predetermined amount of force is about 70 pounds per screw. It would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the force to fastening the screw on the module for secured the module within cabinet, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Claims 6-7 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCarthy in view of Craker and further in view of Martin (U. S. Patent 5,424,916).

McCarthy and Craker do not show the module having first and second printed circuit boards connected to the connector assembly without using ribbon cables. The connectors with surface mounted leads at position 90 degrees. Martin shows a module (30) having first and second printed circuit boards (32-34-figure 2) connected to a connector assembly (50) with 90 degrees lead and without using ribbon cables.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the cabinet of McCarthy and Craker and provide the module having more than one circuit board connected to the connector assembly as taught by Martin in order to reduce a connection between two boards and backplane connector of the cabinet.

Claims 12 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCarthy in view of Craker and further in view of McKenzie (U. S. Patent 4,002,386).

McCarthy and Craker disclose and satisfy all of the claimed invention, except for the flexible handle mounted on the faceplate of the module. McKenzie teaches the flexible handle (24) as shown in figures 2 and 3.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the cabinet of McCarthy and Craker and provide the flexible handle as taught by McKenzie in order to use to remove the module from the cabinet.

Response to Arguments

Applicant's arguments with respect to claims 1-7 and 9-24 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan T Dinh whose telephone number is 703-306-5856. The examiner can normally be reached on M-F.

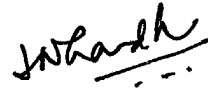
Application/Control Number: 09/224,340
Art Unit: 2841

Page 7

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on 703-308-3301. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-3431 for regular communications and 703-308-3431 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

TD
September 25, 2001


Jayprakash N. Gandhi
Primary Examiner
Technology Center 2800